

Claims

- [c1] A method, comprising the steps of:
establishing a plurality of virtual machines;
establishing a plurality of partitions of processor time;
assigning each virtual machine of the plurality of virtual machines to a partition of the plurality of partitions;
running, on a single processor, each virtual machine during its assigned partition; and
determining whether a virtual machine has any action to perform during its assigned partition and will thus be inactive during its assigned partition.
- [c2] The method of claim 1, wherein at least one virtual machine of the plurality of virtual machines comprises a JAVA virtual machine.
- [c3] The method of claim 1, wherein the plurality of virtual machines comprises a plurality of JAVA virtual machines.
- [c4] The method of claim 1, wherein said assigning step takes into account results of prior determining steps in making assignments of virtual machines to partitions.
- [c5] The method of claim 1, further comprising the step of establishing a plurality of partitions of processor memory.
- [c6] The method of claim 1, further comprising the step of placing the single processor into a reduced power mode during a partition assigned to a virtual machine that has been determined to be inactive by said determining step.
- [c7] The method of claim 6, wherein at least one virtual machine of the plurality of virtual machines comprises a JAVA virtual machine.
- [c8] The method of claim 6, wherein the plurality of virtual machines comprises a plurality of JAVA virtual machines.
- [c9] The method of claim 6, wherein the reduced power mode is terminated at the end of the partition assigned to the inactive virtual machine.

- [c10] The method of claim 1, further comprising the step of reassigning, to another virtual machine, a partition previously assigned to a virtual machine that has been determined to be inactive by said determining step.
- [c11] The method according to claim 10, wherein said reassigning step assigns a partition associated with an inactive virtual machine to the virtual machine assigned to the next partition.
- [c12] The method according to claim 10, wherein said reassigning step assigns a partition associated with an inactive virtual machine to the next occurring partition that has been assigned to a virtual machine determined not to be inactive.
- [c13] A computing apparatus, comprising:
a memory component storing code establishing a plurality of virtual machines, establishing a plurality of partitions of processor time, assigning each virtual machine of the plurality of virtual machines to a specific partition of the plurality of partitions, and determining whether a virtual machine has any action to perform during its assigned partition and will thus be inactive during its assigned partition;
a processor, coupled with said memory component, said processor being capable of running each virtual machine during its assigned partition and of running code stored on said memory component; and
wherein said memory component also stores code placing said processor into a lower power mode during a partition assigned to an inactive virtual machine.
- [c14] The apparatus according to claim 13, wherein said processor comprises an embedded, low power processor.
- [c15] The apparatus according to claim 13 wherein said processor comprises a JAVA processor.
- [c16] The apparatus according to claim 13, wherein said processor comprises an embedded, low power JAVA processor.

[c17] The apparatus according to claim 13, wherein said processor comprises an aj-80 processor.

[c18] The apparatus according to claim 13, wherein said processor comprises an aj-100 processor.

[c19] A computing apparatus, comprising:
a memory component storing code establishing a plurality of virtual machines, establishing a plurality of partitions of processor time, assigning each virtual machine of the plurality of virtual machines to a specific partition of the plurality of partitions, and determining whether a virtual machine will be inactive during its assigned partition;
a processor, coupled with said memory component, to run each virtual machine during its assigned partition and to run code stored on said memory component; and
wherein said memory component also stores code activating a subsequent virtual machine during a partition assigned to an inactive virtual machine.

[c20] A computing apparatus, comprising:
means for storing code establishing a plurality of virtual machines, establishing a plurality of partitions of processor time, assigning each virtual machine of the plurality of virtual machines to a specific partition of the plurality of partitions, and determining whether a virtual machine has any action to perform during its assigned partition;
means for processing, coupled with said means for storing, said means for processing running each virtual machine during its assigned partition and running code stored on said means for storing; and
wherein said means for storing also stores code placing said means for processing into a reduced power mode for the duration of a partition that has been determined to have an inactive virtual machine.

[c21] A computing apparatus, comprising:
means for storing code establishing a plurality of virtual machines, establishing a plurality of partitions of processor time, assigning each virtual

machine of the plurality of virtual machines to a specific partition of the plurality of partitions, and determining whether a virtual machine has any action to perform during its assigned partition;
means for processing, coupled with said means for storing, said means for processing running each virtual machine during its assigned partition and running code stored on said means for storing; and
wherein said means for storing also stores code reassigning, to another virtual machine, a partition previously assigned to a virtual machine that has been determined to be inactive.

[c22] A computer-readable storage medium, comprising:
a computer-executable code for establishing a plurality of virtual machines, establishing a plurality of partitions of processor time, assigning each virtual machine of the plurality of virtual machines to a specific partition of the plurality of partitions, determining whether a virtual machine will be inactive during its assigned partition, and for activating a subsequently scheduled virtual machine for the duration of a partition that has been determined to have an inactive virtual machine.

[c23] A computer-readable storage medium, comprising:
a computer-executable code for establishing a plurality of virtual machines, establishing a plurality of partitions of processor time, assigning each virtual machine of the plurality of virtual machines to a specific partition of the plurality of partitions, determining whether a virtual machine will be inactive during its assigned partition, and for activating a reduced power mode for the duration of a partition that has been determined to have an inactive virtual machine.

[c24] A computer-readable storage medium, comprising:
a computer-executable code to establish a virtual machine schedule for activating a plurality of virtual machines, to determine whether a scheduled virtual machine will be inactive during its scheduled activation time, and to initiate a reduced power mode for the duration of an inactive virtual

machine's scheduled activation time.

[c25] A computer-readable storage medium, comprising:
a computer-executable code to establish a virtual machine schedule for activating a plurality of virtual machines, to determine whether a scheduled virtual machine will be inactive during its scheduled activation time, and to initiate reassignment, to another virtual machine, of a partition previously assigned to a virtual machine that has been determined to be inactive.

[c26] A method, comprising the steps of:
establishing a virtual machine schedule for activating, on a single processor, a plurality of virtual machines;
determining whether a scheduled virtual machine will be inactive during its scheduled activation time; and
initiating processor entry of a reduced power mode for the duration of an inactive virtual machine's scheduled activation time.

[c27] A method, comprising the steps of:
establishing a virtual machine schedule for activating, on a single processor, a plurality of virtual machines;
determining whether a scheduled virtual machine will be inactive during its scheduled activation time; and
initiating reassignment of an inactive virtual machine's scheduled activation time to a virtual machine determined to be active.

[c28] A method, comprising the steps of:
establishing a plurality of JAVA virtual machines;
establishing a plurality of partitions of processor time;
assigning each JAVA virtual machine of the plurality of JAVA virtual machines to a partition of the plurality of partitions;
running, on a single embedded low power JAVA processor, each JAVA virtual machine during its assigned partition;
determining whether a JAVA virtual machine to be run has any action to perform during its assigned partition and will thus be inactive during its

[illegible]

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(32)	(33)	(34)	(35)	(36)	(37)	(38)	(39)	(40)	(41)	(42)	(43)	(44)	(45)	(46)	(47)	(48)	(49)	(50)	(51)	(52)	(53)	(54)	(55)	(56)	(57)	(58)	(59)	(60)	(61)	(62)	(63)	(64)	(65)	(66)	(67)	(68)	(69)	(70)	(71)	(72)	(73)	(74)	(75)	(76)	(77)	(78)	(79)	(80)	(81)	(82)	(83)	(84)	(85)	(86)	(87)	(88)	(89)	(90)	(91)	(92)	(93)	(94)	(95)	(96)	(97)	(98)	(99)	(100)
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100